

CLIENT:

Steni AS

Berganmoen

3277 Steinsholt

Norway

Attn: Tor Unneberg

Test Report No: 177:002454-01

Date: December 27, 2006

The following sample was submitted by the Client as: Steni Natur Type F

DATE OF RECEIPT:

DECEMBER 12, 2006

TESTING PERIOD:

DECEMBER 26, 2006

AUTHORIZATION:

Order Confirmation Number 177:002454, dated December 12, 2006

TEST REQUESTED:

The submitted sample was tested for Surface Burning Characteristics in

accordance with the procedures outlined in ASTM E84-05.

TEST RESULTS:

Flame Spread Index 10

Smoke Developed Value

60

PLEASE SEE PAGE 3 FOR DETAILED DATA

PREPARED BY:

SIGNED FOR AND ON BEHALF OF

SGS U.S. TESTING COMPANY INC.

Fire Technology

Arthur D. Fiorino, Senior Technician

Fire Technology

Page 1 of 3

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CLIENT:

Steni AS

Report No.: 177:002454-01 **Date:** December 27, 2006

Page: 2 of 3

RESULTS:

INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E-84-05. The report also includes Material Identification, Method of Preparation, Mounting and Conditioning of the specimens.

The tests were performed in accordance with the specifications set forth in ASTM E-84-05, Standard Test Method for Surface Burning Characteristics of Building Materials, both as to equipment and test procedure. This test procedure is similar to UL-723, ANSI No. 2.5, NFPA No. 255 and UBC 42-1.

The test results cover two parameters: Flame Spread and Smoke Developed Values during a 10-minute fire exposure. Inorganic cement board and red oak flooring are used as comparative standards and their responses are assigned arbitrary values of 0 and 100, respectively.

PREPARATION AND CONDITIONING:

Three panels of sample supplied by the client were placed into the fire chamber end to end to form a 21 inch wide X 24 foot long specimen for testing. Inorganic cement boards were placed over the sample prior to testing as a means of protecting the interior of the tunnel lid.

The sample was conditioned at $73^{\circ} \pm 5^{\circ}$ Fahrenheit and $50 \pm 5\%$ relative humidity.

TEST PROCEDURE:

The tunnel was thoroughly pre-heated by burning natural gas. When the brick temperature, sensed by a floor thermocouple, had reached the prescribed 105° Fahrenheit \pm 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E-84-05 procedures.

The operation of the tunnel was checked by performing a 10-minute test with inorganic board on the day of the test.



CLIENT:

Steni AS

Report No.: 177:002454-01 **Date:** December 27, 2006

Page: 3 of 3

RESULTS:

TEST RESULTS:

The test results, calculated in accordance with ASTM E-84-05 for Flame Spread and Smoke Developed Values are as follows:

Test Specimen

: Steni Natur Type F

Flame Spread Index*

: 10

Smoke Developed Value*

: 60

OBSERVATIONS:

Ignition occurred at 5-minutes. The following observations were also noted:

Charring

Flaking

Flaking Embers

Warping

Falling

Floor Burning

After Burn

After Glow

RATING:

The National Fire Protection Association Life Safety Code 101, Section 6-5.3, "Interior Wall and Ceiling Finish Classification", has a means of classifying materials with respect to Flame Spread and Smoke Developed when tested in accordance with NFPA 255, "Method of Test of Surface Burning Characteristics of Building Materials", (ASTM E-84).

The classifications are as follows:

Class A Interior Wall & Ceiling Finish:

Flame Spread - 0-25

Smoke Developed - 0-450

Class B Interior Wall & Ceiling Finish:

Flame Spread - 26-75

Smoke Developed - 0-450

Class C Interior Wall & Ceiling Finish:

Flame Spread -

76-200

Smoke Developed - 0-450

Since the sample received a Flame Spread of 10 and a Smoke Developed Value of 60, it would meet the parameters for a Class A Interior Wall & Ceiling Finish Category.

End of Report

^{*}Rounded off to the nearest 5 units. Graphs of the Flame Spread, Smoke Developed and Time-Temperature are shown on the attached charts at the end of this report.